REMARKS

Amended claims

The claims have been amended herein and support for specific amended text is as follows. The terminology "wherein the recombinant viral protein or peptide consists of white spot syndrome virus sequence of a protein selected from the group consisting of VP24, VP28, VP26, VP19, LGBP and TSV" can be found in paragraphs [012], [42] and [52]. Support for the terminology reciting "a truncated version of the protein or peptide having similar binding affinities to the peptide or protein" can be found in paragraph [049]. Support for the terminology "one or more recombinant viral protein or peptide capable of reducing or inhibiting binding of a disease-causing agent in one or more cells of the animal" can be found in paragraph [015].

Rejections of Claims and Traversal Thereof

In the October 2, 2008 Office Action,

claims 18-20, 23-26 and 32 were rejected under 35 U.S.C. §112, second paragraph; and

claims 17-26 and 28-31 were rejected under 35 U.S.C. §102(e)(2) as being anticipated by Frenken et al, (U.S. Patent No. 6,517,829) as evidenced by van Hulten et al., (*J. General Virol.* 81: 2525-2529, 2000).

The above-defined rejections are hereby traversed, and reconsideration of the patentability of the pending claims is requested, in light of the ensuing remarks.

Rejection under 35 U.S.C. §112, Second Paragraph

Claims 18-20, 23-26 and 32 were rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For completeness, applicant will address each of the Office's remarks and contentions individually. However, before the rejections are addressed, a complete understanding of applicants' invention is necessary.

Claims 17 and 18, as amended, herein recite:

17. A feed for an animal comprising one or more ~~a~~ recombinant viral protein or peptide capable of reducing or inhibiting binding of a disease-causing agent in one or more cells of the animal, wherein the recombinant viral protein or peptide consists of a sequence for a white spot syndrome virus (WSSV) or Taura Syndrome Virsu (TSV) protein selected from the group consisting of VP24, VP28, VP26, VP19, LGBP and TSV capsid protein.

18. The feed of claim 17, wherein the recombinant viral protein or peptide is a truncated version of the recombinant viral protein or peptide having similar binding affinities to the untruncated recombinant viral peptide or protein.

Thus, the claimed invention recites the use of a full length viral protein or a truncated version that exhibits similiar binding affinities to compete for the virus binding receptor. The nucleotide sequences for genes expressing the viral proteins are well known along with the corresponding amino acid sequences. Thus one skilled in the art would have no problem in practicing the present invention. Further, the specification provides ample guidance for determining the binding affinity of any truncated from as described in paragraph [049].

The above explanation and claim amendments overcome the rejections under §112, second paragraph for claims 18 and 24. One skilled in the art would have no difficulty in understanding the meaning of "truncated" relative to the protein segment and the specification provides guidance to test the binding affinity of such truncated forms relative to not only the full viral protein but the virus itself.

All rejections under section 112 have been obviated in light of the amendments to the claims that address all the comments of the Office.

For the reasons set forth above, it is clear that the claims as amended are readily understandable to one of skill in the art when read in light of the specification. Accordingly, applicants respectfully request the withdrawal of such §112 rejections.

Rejections under 35 USC §102

Claims 17-26 and 28-31 were rejected under 35 U.S.C. §102(e)(2) as being anticipated by Frenken, et al., (U.S. Patent No. 6,517,829) as evidenced by van Hulten et al., (*J. General Virol.* 81: 2525-2529, 2000). Applicants submit that the presently claimed invention is not anticipated by Frenken,etal.

To anticipate a claim, a reference must be enabling. This point was recently reaffirmed in an April 7, 2000 decision of the Court of Appeals for the Federal Circuit (CAFC).[1] Citing *In re Paulsen*,[2] the court stated that to be anticipating, a prior art reference must:

1) disclose each and every limitation of the claimed invention;

2) be enabling; and

3) describe the claimed invention sufficiently to place it in possession of a person of ordinary skill in the field of the invention.

The Frenken, et al. reference does not meet this standard.

Applicants' claim 17 reads as follows:

> 17. A feed for an animal comprising one or more ~~a~~ recombinant viral protein or peptide capable of reducing or inhibiting binding of a disease-causing agent in one or more cells of the animal, wherein the recombinant viral protein or peptide consists of a sequence for a white spot syndrome virus (WSSV) or Taura Syndrome Virsu (TSV) protein selected from the group consisting of VP24, VP28, VP26, VP19, LGBP and TSV capsid protein.

According to the Office:

> "every element of the claimed subject matter is disclosed by Frenken et al. with the unrecited limitation(s) being **inherent** in view of what is known in the art" (emphasis added)

Applicants vigorously disagree. Applicants' amended claims recite proteins that consist of the amino acid sequences of VP24, VP28, VP26, LGBP or TSV and if the proteins are truncated then the truncated form must exhibit similar binding affinities to the untruncated recombinant viral peptide or protein.

Viewing the sequence by Frenken, et al. illustrates that it would be impossible to inherently contain sequences encoding the proteins of the presently claimed invention. . It is well settled as a matter of law, that inherency cannot be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency. *In re Oelrich*, 212 USPQ 323 (CCPA 1981). Instead, it must consistently occur each and every time, which is necessary

[1] *Helifix Ltd. v. Blok-Lok, Ltd.*, 54 USPQ2d 1299 (Fed. Cir. 2000).
[2] *In re Paulsen*, 31 U.S.P.Q.2d 1671, 1673 (Fed. Cir. 1994).

under case law to prove inherency. Clearly, the sequence of the cited reference cannot inherently include the amino acid sequences of the proteins as recited in the presently claimed invention.

As stated above, a reference is not anticipatory unless it discloses each and every limitation of the claimed invention, it is enabling, and it described the claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention. Applicants submit that one skilled in the art could not read the cited reference and determine the VP24, VP28, VP26 VP19, LGBP or TSV sequences without an undue amount of experimentation. *See In re Sheppard* , 144 USPQ 42, (CCPA 1981) (reversing a rejection under 35 U.S.C. Section 102(b) where the asserted prior art reference did not permit someone skilled in the art to possess the claimed invention). Thus, the Frenken, et al. reference is not enabling and does not put the claimed invention in the hands of one skilled in the art. (*In re Sun*, 31 USPQ2d 1451 (Fed. Cir. 1993)). Thus this reference does not meet the requirements of an anticipatory reference.

Accordingly, applicants respectfully submit that claims 17-26 and 28-31, as amended herein, are patentably distinguishable over Frenken, et al. Withdrawal of this rejection under 35 U.S.C. §102(e) is requested.

Rejoinder of Method Claims

When an application as originally filed discloses a product and the process for making and/or using such product, and only the claims directed to the product are presented for examination, when a product claim is found allowable, applicant may present claims directed to the process of making and/or using the patentable product for examination through rejoinder procedure in accordance with MPEP §821.04, provided that the process claims depend from or include all the limitations of the allowed product claims.

The currently pending method claims include all the limitations of the product claims and meet all standards of enablement, written description and definiteness under 35 U.S.C. §112. Accordingly, the method claims are in form suitable for future examination upon their rejoinder with the allowed product elected claims. Applicants are requesting that all method claims be rejoined, examined and found allowable.

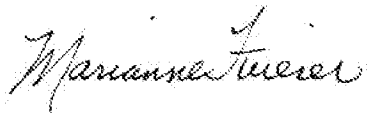
Petition for Extension and Fees Payable

Applicants added five (5) new claims but cancelled an equal amount of claims, and as such, no fee is due for the new claims. Applicant petitions for a two month extension to extend the response due date of January 2, 2009 to March 2, 2009 and the fee is being paid herewith by electronic transfer. If any additional fee is found due for entry of this amendment, the Commissioner is authorized to charge such fee to Deposit Account No. 13-4365 of Moore & Van Allen.

Conclusion

Applicants have satisfied all the requirements for patentability. All pending claims are free of the art and fully comply with the requirements of 35 U.S.C. §112. It therefore is requested that Examiner Devi reconsider the patentability of pending claims in light of the distinguishing remarks herein and withdraw all rejections, thereby placing the application in condition for allowance. Notice of the same is earnestly solicited. If any issues remain outstanding incident to the prosecution of the application, Examiner Devi is requested to contact the undersigned attorney at (919) 286-8089.

Respectfully submitted,



Marianne Fuierer
Reg. No. 39,983
Attorney for Applicant

Moore & Van Allen, PLLC
Telephone: (919) 286-8000
Facsimile: (919) 286-8199